

LISTING OF CLAIMS

1. (currently amended) An isolated p42 nucleic acid encoding a p42 polypeptide from the C-terminal processing fragment of *Plasmodium falciparum* major merozoite surface protein gp195, wherein said p42 nucleic acid is preferentially recognized by an *Agrobacterium*-mediated plant expression system thereby resulting in increased translation of the mRNA transcribed from said p42 nucleic acid wherein said nucleic acid comprises a nucleic acid which hybridizes under high stringency conditions to the complement of the nucleic acid of SEQ ID NO: 1 or SEQ ID NO: 3.

2. (currently amended) The nucleic acid of Claim 1, wherein ~~the sequence of said isolated p42 nucleic acid has been modified to remove potential poly-adenylation sequences, cryptic intron splice sites and RNA instability sequences, thereby resulting in enhanced RNA transcription and stability~~ in a tobacco plant host cell.

3. (canceled)

4. (currently amended) The isolated p42 nucleic acid of ~~Claim 3~~ Claim 1 comprising the ~~nucleotide sequences from 1 through about 1149 of~~ nucleic acid sequence of SEQ ID NO: 3.

5. (currently amended) An *Agrobacterium*-mediated plant expression system for the production of a p42 polypeptide from the C-terminal processing fragment of *Plasmodium falciparum* major merozoite surface protein gp195, said system comprising a DNA construct consisting of operatively linked ~~DNA coding for~~ nucleic acid encoding a modified T-region but no vir-region, wherein said modified T-region comprises naturally occurring border sequences consisting of about 23 nucleotides at the extremities of said modified T-region, ~~and wherein the p42 nucleic acid of Claim 1, the p42 nucleic acid of Claim 2, or the NtMSP1.42C nucleic acid of Claim 3, is flanked by said border sequences~~ and wherein said modified T-region further comprises a nucleic acid which hybridizes under high stringency conditions to the complement of the nucleic acid of SEQ ID NO: 1 or SEQ ID NO: 3.

6-9. (canceled)

10. (currently amended) A method for production of a p42 polypeptide, comprising the steps of:

- (a) introducing an *Agrobacterium* strain into a plant cell wherein said *Agrobacterium* strain comprises at least one plasmid ~~having~~comprising the vir-region of a tumor-inducing plasmid but having ~~virtually~~ no T-region, and at least one other plasmid comprising the modified T-region of Claim 5 but having no vir-region, wherein said plant cell becomes transformed; and
- (b) extracting said p42 polypeptide from said transformed plant cell.

11. (canceled)

12. (original) The method of Claim 10 wherein said *Agrobacterium* strain is *Agrobacterium tumefaciens* strain LBA4404.

13-16. (canceled)

17. (new) The isolated p42 nucleic acid of Claim 1 comprising the nucleic acid sequence of SEQ ID NO: 1.

18. (new) The *Agrobacterium*-mediated plant expression system of claim 5, wherein the modified T-region comprises the nucleic acid sequence of SEQ ID NO: 1.

19. (new) The *Agrobacterium*-mediated plant expression system of claim 5, wherein the modified T-region comprises the nucleic acid sequence of SEQ ID NO: 3.